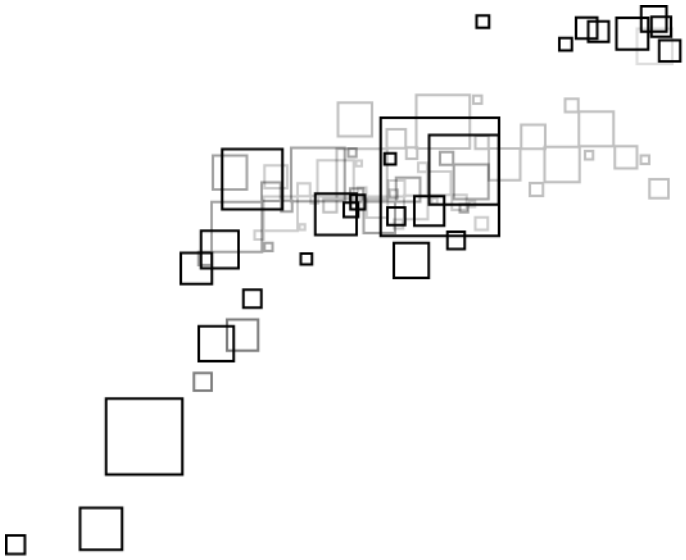

User Manual

WL556E

Portable 300Mbps Wireless-N Extender

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About the Device

Aztech WL556E Portable 300Mbps Wireless-N Extender supports wireless 802.11b/g/n standards with one 10/100Base-T Ethernet port.

WL556E is designed with MIMO technology to extend the reach of any existing wireless router/AP to maximize the coverage in your home or office. It basically receives the signal from your wireless router/AP and repeats it to extend the range to farther locations that are previously unreachable.

Equipped with 64/128-bit WEP, WIFI Protected Access (WPA), and the latest WPA2 encryption with TKIP and AES algorithm to protect your wireless network from unauthorized access. MAC Address Filtering for wireless links provides an additional layer of security for your wireless network.

The device comes with 1 x 10/100M Auto MDI/MDIx Ethernet port that can be used to connect to an existing wired network to serve as a wireless AP or wireless bridge. It can also be used to configure the device via its web-based GUI, or upgrade the firmware when connected to the Network Interface Card of your PC.

Minimum System Requirements

Your computer must meet the following minimum requirements.

- Any operating system can be used
- Web Browser
- 233MHz processor
- Ethernet network adapter
- Or Wireless network adapter

Package Contents

Package contents are listed below. For any missing items, please contact your dealer immediately. Product contents may vary for different models.

- WL556E
- Ethernet cable
- Easy Start Guide
- Resource CD

Device Overview

Front Panel

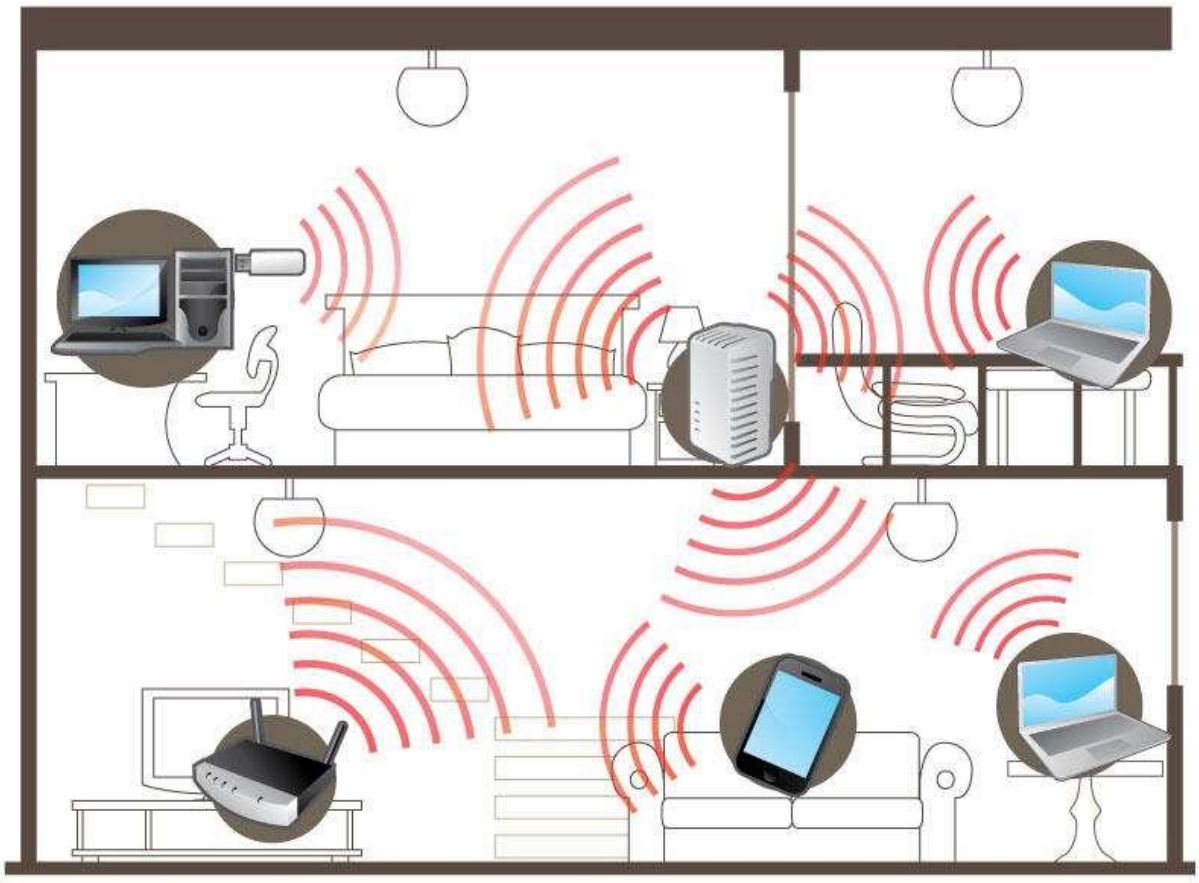
LABEL	STATE	DESCRIPTION
POWER LED	On – Solid Green Off	Device is powered ON Device is powered OFF
ETHERNET LED	On – Solid Green On – Blinking Green Off	Ethernet device is connected Indicates LAN activity No Ethernet device connected
WIRELESS LED	On – Solid Green On – Blinking Green Off	Wireless interface is UP Indicates wireless activity Wireless interface is DOWN
WPS LED and BUTTON	On – Solid Green On – Blinking Green Off	WPS association is successful WPS authentication on going WPS disabled

Bottom Panel

LABEL	DESCRIPTION
RESET	Press the Reset button for 5 seconds to restore the device to default factory settings
ETHERNET PORT	Connect to computers/Ethernet devices

Configuring the Device

Before moving ahead to setup your wireless extender, it is often a good idea to identify the areas where you have good wireless reception and weak or no wireless signal at all. Based from this assessment you may place the wireless extender in between a location where you have good wireless reception and where you have poor wireless coverage. The illustration below is an example of a network diagram.



NOTE: Placement of the Wireless Extender is crucial to get the best possible results for extending your existing wireless signal. It is ideal for the wireless extender to be placed in a location where it can receive good wireless signal from the wireless router/AP so as to avoid disconnection and packet loss.

Setup Your Device

Setting up the device is easy. Simply follow the steps below to connect the device to your existing wireless router/AP. Please note that the main router/AP and Wireless Extender must be on the same wireless channel.

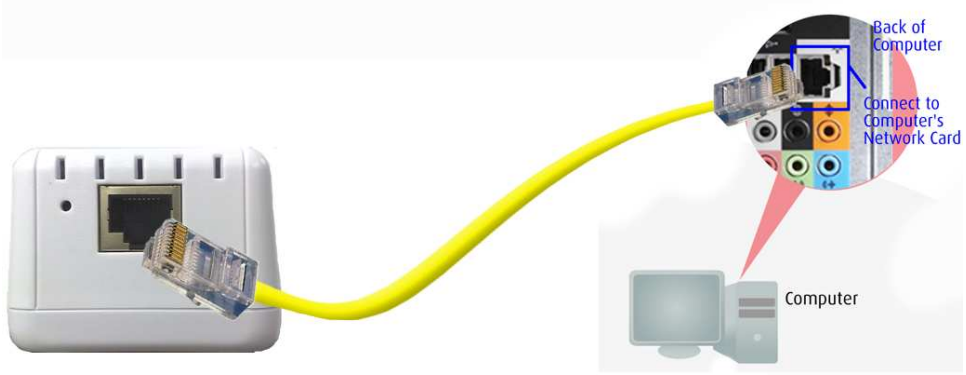
To Setup your device via the Web GUI:

1. Connect the WL556E to a power outlet.

2. Connect a PC/laptop to the Wireless Extender.

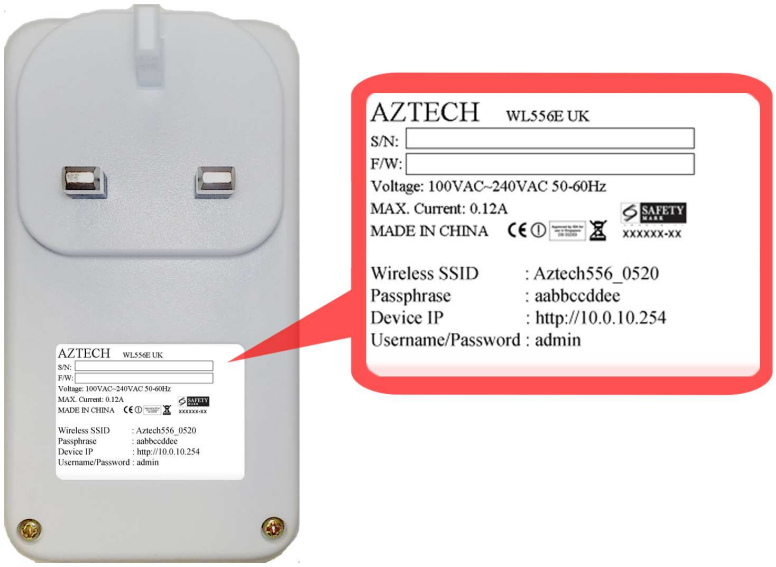
   For WIRED Connection

   Plug an Ethernet cable to the Ethernet port at the base portion of the device.



For WIRELESS Connection

You can find the default SSID and wireless security information from the sticker located at the back of the device.



3. Once a connection to the device is established, your PC/laptop will receive an IP address and you can start the configuration using the web graphical user interface.
4. To access the web GUI, Open your web browser
5. Type 10.0.10.254 on the address bar

6. Input admin for both username and password fields and click on the OK button

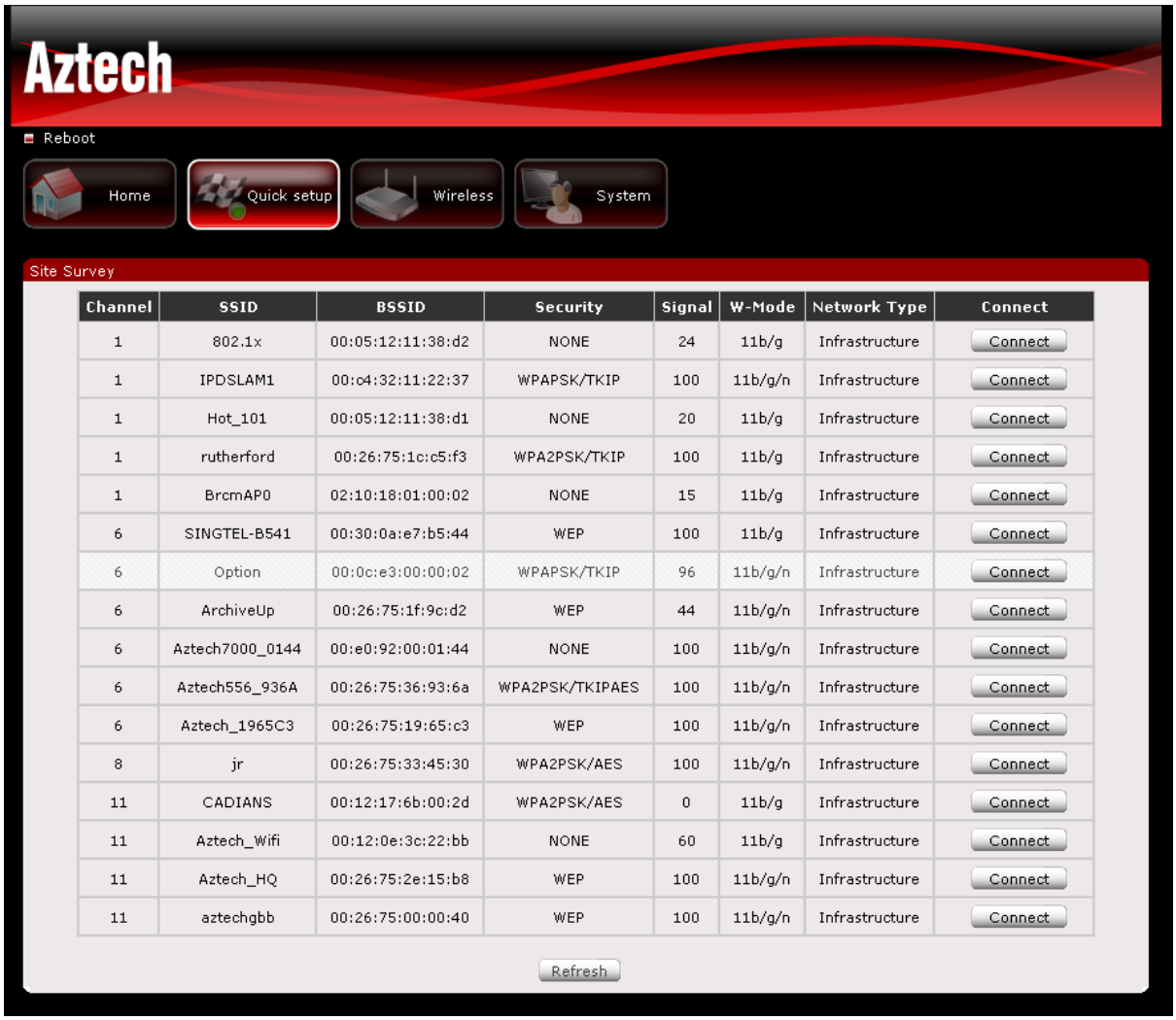
Connect to 10.0.10.254
The server 10.0.10.254 at GoAhead requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
User name:
admin
Password:
Remember my password
OK
Cancel

7. On the top pane, click on Quick Setup

NOTE: If you are connecting to a hidden wireless network, you need to key-in the information from your existing wireless router/AP manually.

8. Choose the Operation mode from the drop-down box

9. Click the Site Survey button to show the list of available wireless networks



Channel	SSID	BSSID	Security	Signal	W-Mode	Network Type	Connect
1	802.1x	00:05:12:11:38:d2	NONE	24	11b/g	Infrastructure	Connect
1	IPDSLAM1	00:c4:32:11:22:37	WPAPSK/TKIP	100	11b/g/n	Infrastructure	Connect
1	Hot_101	00:05:12:11:38:d1	NONE	20	11b/g	Infrastructure	Connect
1	rutherford	00:26:75:1c:c5:f3	WPA2PSK/TKIP	100	11b/g	Infrastructure	Connect
1	BrcmAP0	02:10:18:01:00:02	NONE	15	11b/g	Infrastructure	Connect
6	SINGTEL-B541	00:30:0a:e7:b5:44	WEP	100	11b/g	Infrastructure	Connect
6	Option	00:0c:e3:00:00:02	WPAPSK/TKIP	96	11b/g/n	Infrastructure	Connect
6	ArchiveUp	00:26:75:1f:9c:d2	WEP	44	11b/g/n	Infrastructure	Connect
6	Aztech7000_0144	00:e0:92:00:01:44	NONE	100	11b/g/n	Infrastructure	Connect
6	Aztech556_936A	00:26:75:36:93:6a	WPA2PSK/TKIPAES	100	11b/g/n	Infrastructure	Connect
6	Aztech_1965C3	00:26:75:19:65:c3	WEP	100	11b/g/n	Infrastructure	Connect
8	jr	00:26:75:33:45:30	WPA2PSK/AES	100	11b/g/n	Infrastructure	Connect
11	CADIANS	00:12:17:6b:00:2d	WPA2PSK/AES	0	11b/g	Infrastructure	Connect
11	Aztech_Wifi	00:12:0e:3c:22:bb	NONE	60	11b/g	Infrastructure	Connect
11	Aztech_HQ	00:26:75:2e:15:b8	WEP	100	11b/g/n	Infrastructure	Connect
11	aztechgbb	00:26:75:00:00:40	WEP	100	11b/g/n	Infrastructure	Connect

10. Click the Connect button located on the right side of the Wireless network you want to connect to

11. Key-in the wireless network key/passphrase

12. Click the Apply button to commit the changes

Use the Device as a Wireless Repeater

Once the wireless connection from the WL556E to the main AP/router is established you can connect your wireless devices like laptops and smartphones through the wireless repeater. These devices will obtain an IP address from the main AP/router and should be able to access the Internet from farther locations previously unreachable by your wireless signal.

Setup Diagram

Use the Device as a Wireless Bridge

Connect wired devices to your wireless network by connecting an Ethernet cable from a wired device, such as a Desktop PC, Game Console or Internet-ready LCD TV, to the Ethernet port of the WL556E.

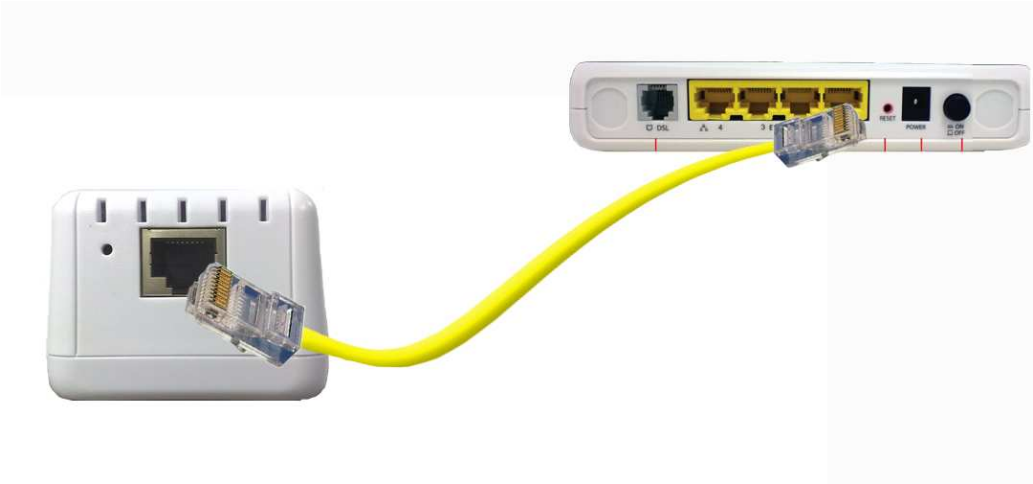
Setup Diagram

Setup Your Device as a Wireless AP

Use the WL556E as a Wireless Access Point to turn a regular modem-router into a wireless capable networking device. Simply connect an Ethernet cable from any available Ethernet LAN port on the modem-router to the Ethernet port of the WL556E. The WL556E will serve as a wireless interface for your wireless-enabled devices such as laptops and smartphones to connect to the Internet via your existing modem-router.

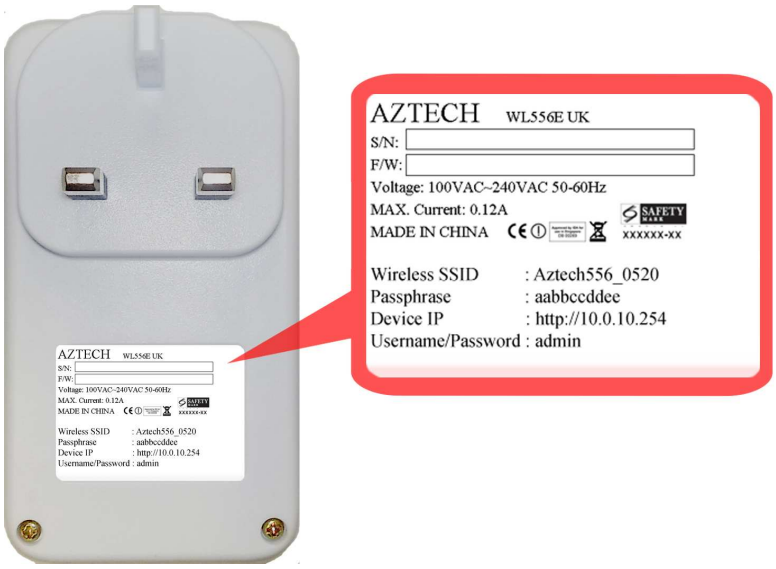
To setup the device as a wireless AP:

1. Connect an Ethernet cable from an available port in your modem-router and connect the other end of the Ethernet cable to the Ethernet port of the WL556E.



For a new Out-of-The-Box unit, No extra configuration is needed for the WL556E to be used as a wireless AP. Simply connect an Ethernet cable from your existing modem-router to the WL556E and you are ready to surf the Internet wirelessly. If you have already made any configuration on the WL556E, press the Reset button beside the Ethernet port for 5 seconds to restore the device to its factory default configuration.

2. You may refer to the sticker pasted at the back of the WL556E for the default SSID and password to connect your wireless devices.



Setup Diagram

NOTE: To change any wireless settings on the WL556E, you would need to set a static IP address on your wireless network card to be able to access the web GUI before you can configure the settings. Please refer to the steps on how to set a static IP on your PC also included in this manual.

Changing the Wireless Settings

Modify the default Wireless Settings to suit your own preference.

To change the Wireless settings via the Web GUI:

1. Open your browser
2. Type 10.0.10.254 on the address bar
3. Input admin for both username and password fields and click on OK
4. On the top pane, click the Wireless button to show the menu
5. You can change the advanced wireless settings as preferred from this page

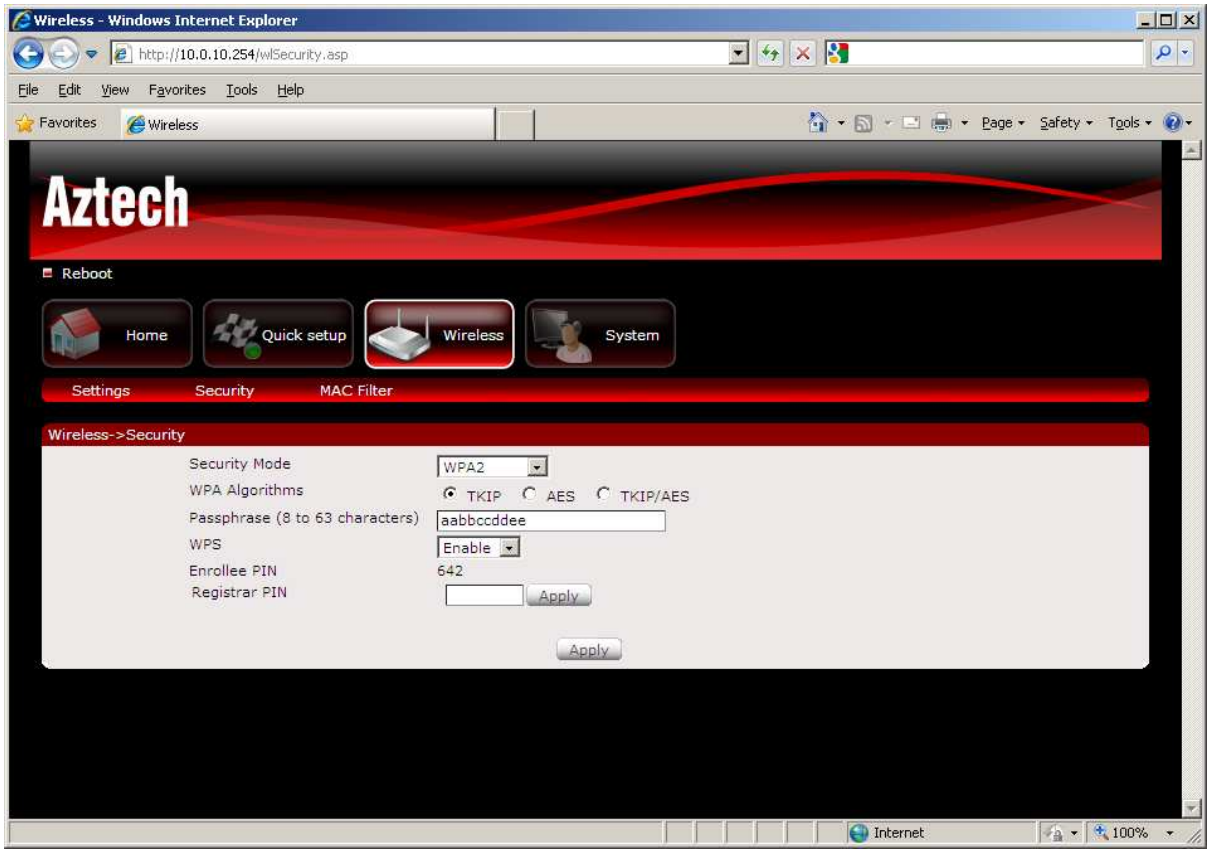
6. Click Apply to commit the changes
7. Ensure to recreate the wireless profile on your computer to match the new settings

Changing the Wireless Security Settings

Modify the default Wireless Security Settings to suit your own preference.

To change the Wireless security settings via the Web GUI:

1. Open your browser
2. Type 10.0.10.254 on the address bar
3. Input admin for both username and password fields and click on OK
4. Click the Wireless button, and click the Security menu. You can change the wireless security settings as preferred from this page



5. Click Apply to commit the changes
6. Ensure to recreate the wireless profile on your computer to match the new settings

WPS

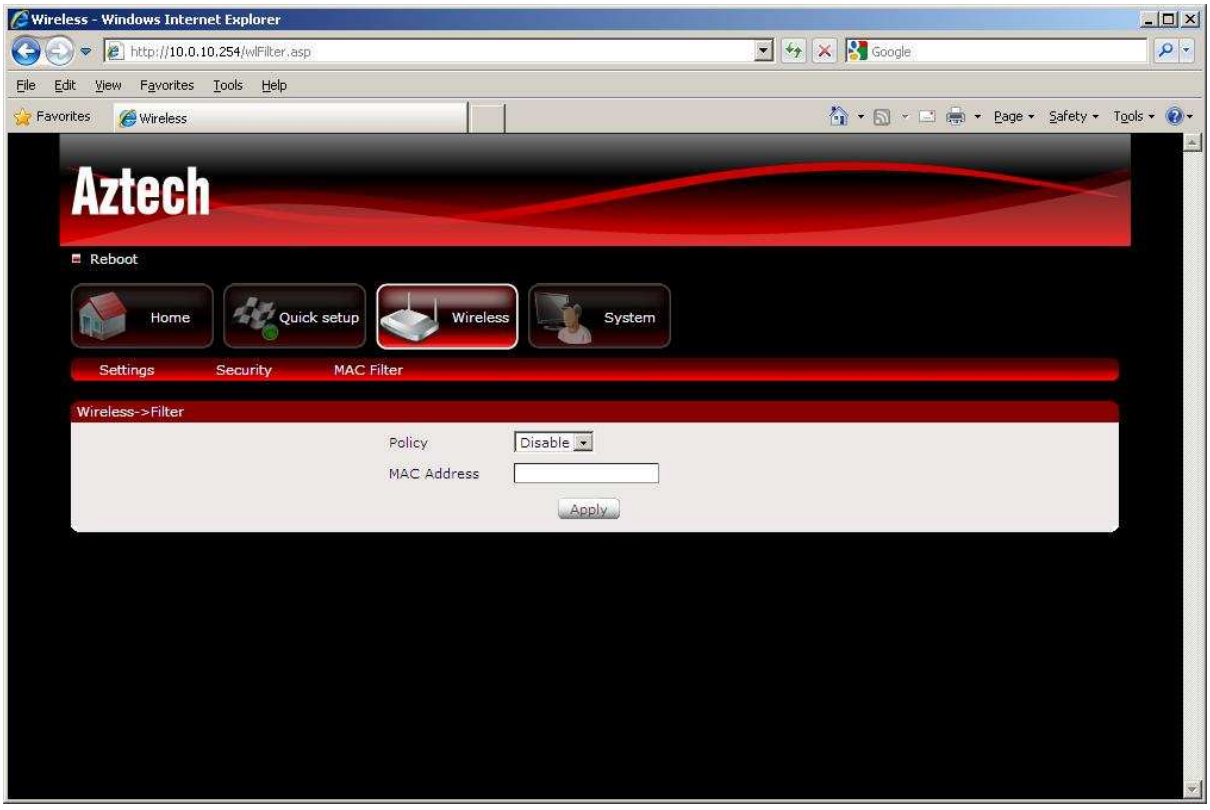
WPS or Wifi Protected Setup makes it easy for wireless clients to connect to the wireless repeater. Simply press the WPS button on the repeater and press the WPS button on the wireless client within 2 minutes, and the wireless security authentication will be done automatically.

Configuring Wireless MAC Filtering

Wireless MAC Filtering allows you to select which wireless clients to allow or deny access to the Wireless Repeater.

To configure Wireless MAC Filtering via the Web GUI:

1. Open your browser
2. Type 10.0.10.254 on the address bar
3. Input admin for both username and password fields and click on OK
4. Click the Wireless button, and click MAC filter menu. You can select Allow or Deny from the Policy drop down box and enter the MAC address of the wireless client you wish to allow/deny access to the wireless repeater



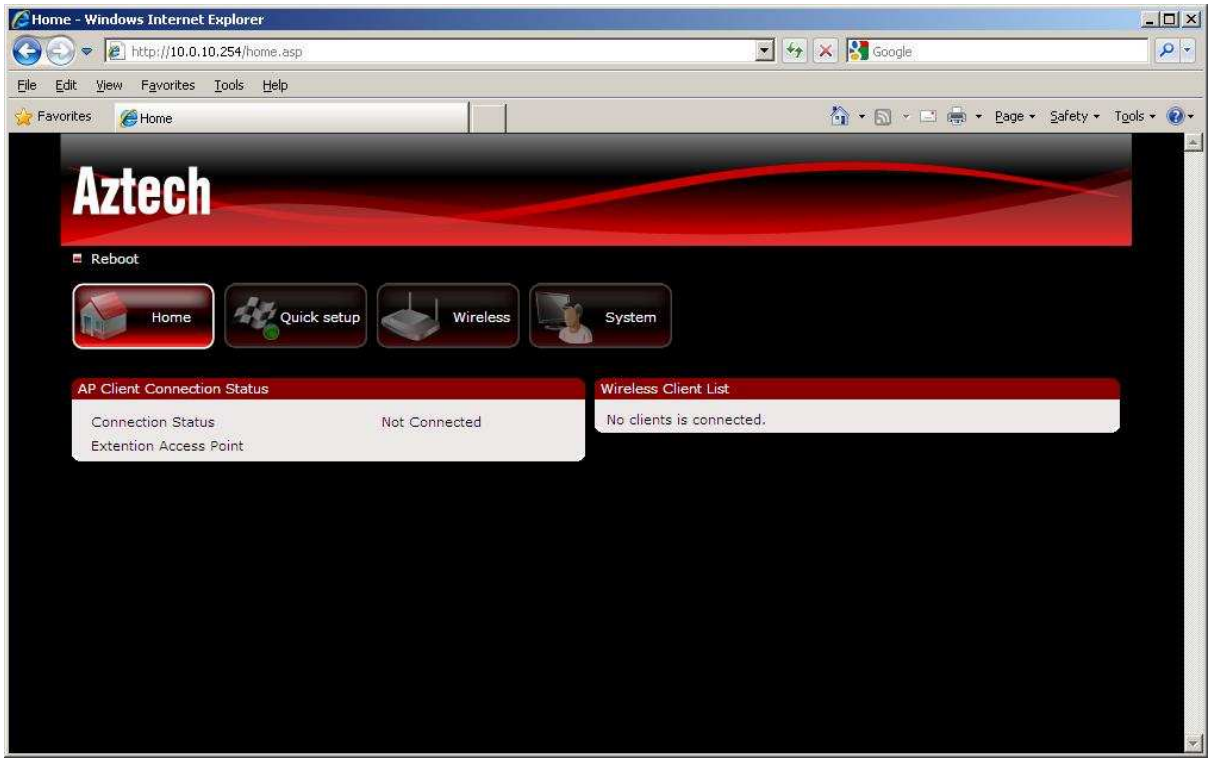
5. Click Apply to commit the settings

Viewing the Home Page

The Home Page will tell you information about your device.

To view the Home Page via the Web GUI:

1. Open your browser
2. Type 10.0.10.254 on the address bar
3. Input admin for both username and password fields and click on OK



4. AP Client Connection Status displays the Connection status and SSID of the Access Point being extended.
5. Wireless Client List displays the current wireless clients connected to the repeater.

System Management

The System Management menu is used for device settings administration.

Accessing System Management

To access the Web User Interface:

1. Open your browser.
2. Type-in 10.0.10.254 on the address bar and then press Enter.
3. Input admin for both username and password fields and click on OK

Connect to 10.0.10.254
The server 10.0.10.254 at GoAhead requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
User name:
admin
Password:
Remember my password
OK
Cancel

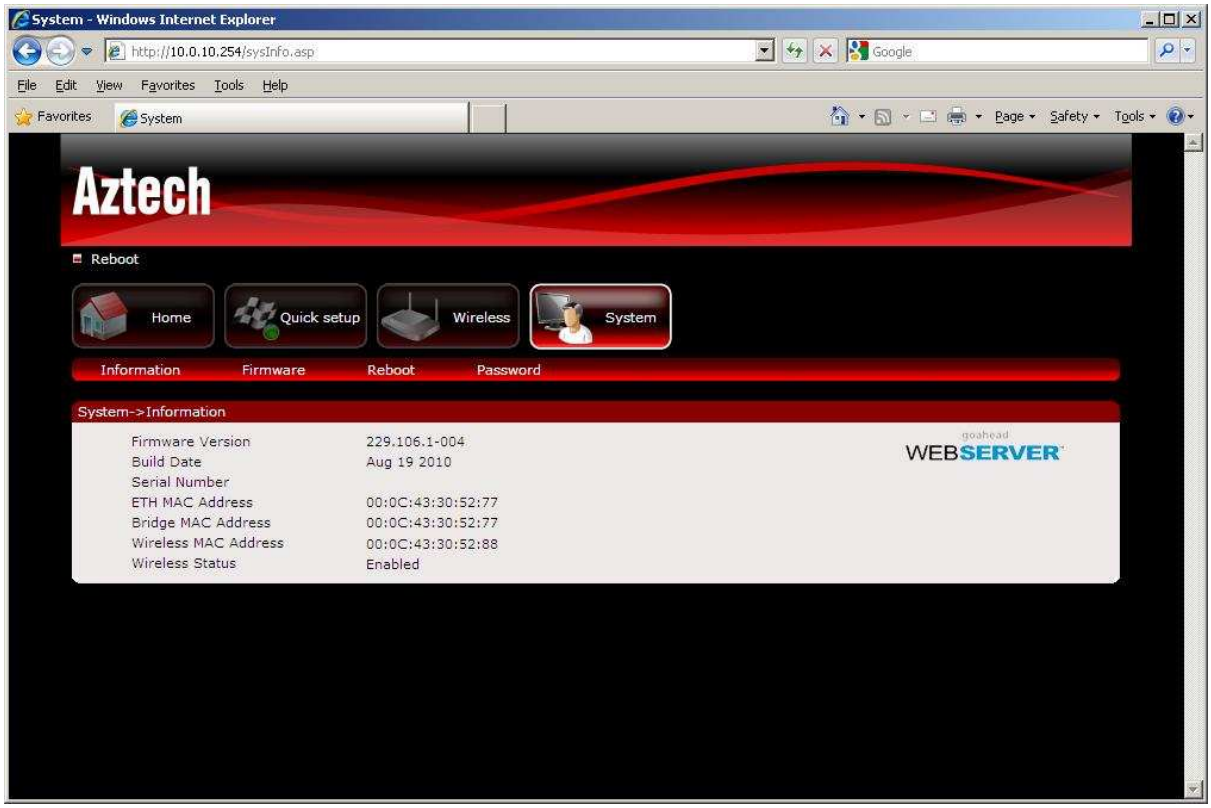
What's on System Management

System Management includes the following options:

- Information
- Firmware
- Reboot
- Password

Information

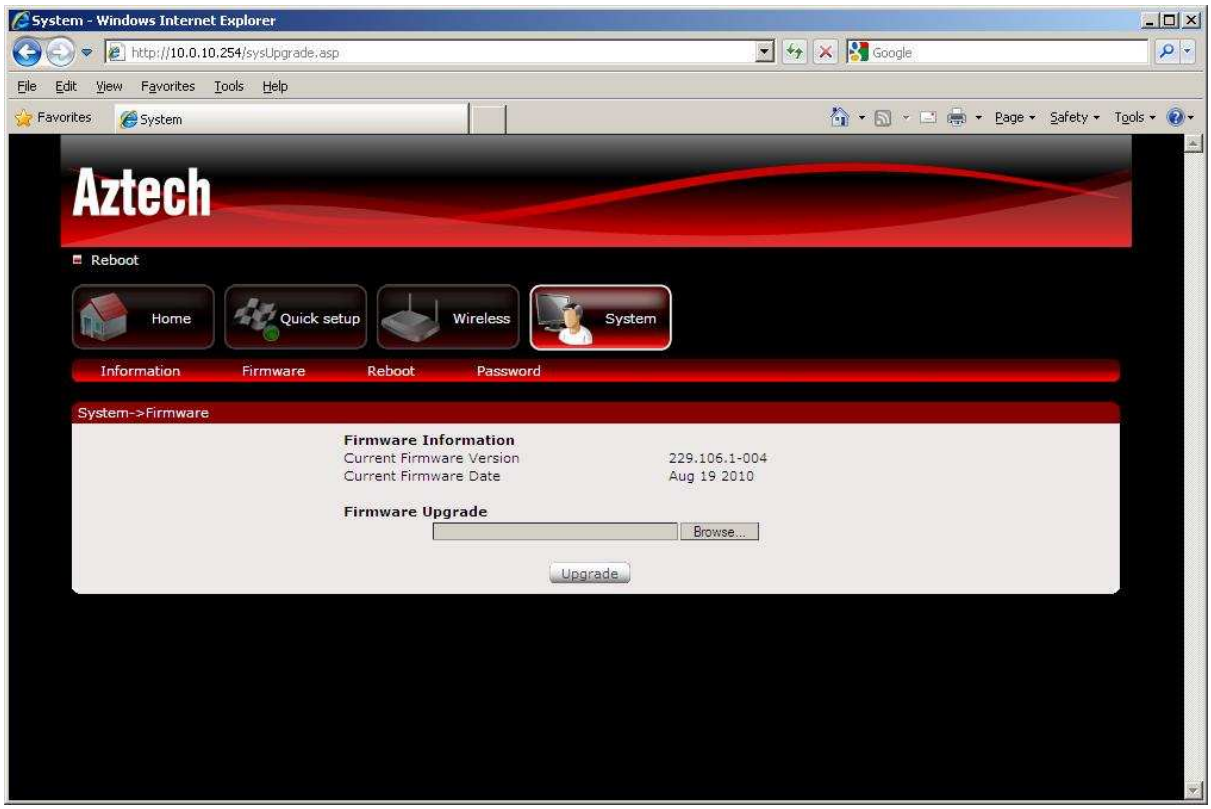
This page shows the device information. Below is the list of information shown in this menu.



- Firmware Version – Shows the current firmware version of the device
- Build Date – Shows the firmware release date
- Serial Number – Shows the serial number of the device
- ETH MAC Address – Shows device's Ethernet interface MAC address
- Wireless MAC Address – Shows device's wireless interface MAC address
- Wireless Status – Shows the status of the wireless interface.

Firmware

Firmware menu allows you to see the current firmware version and build date as well as upgrade the firmware of the device.

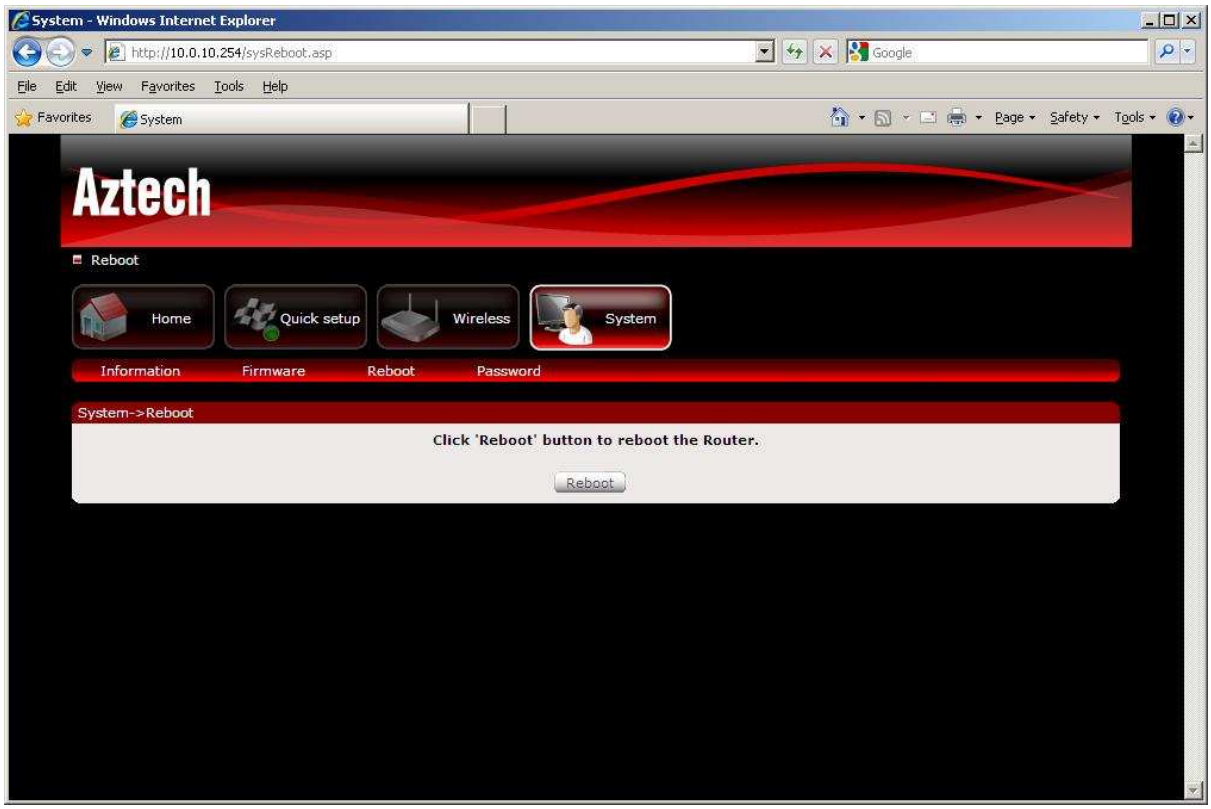


- Firmware Information – Shows the current firmware's version and build date
- Firmware Upgrade – Load a new firmware upgrade file to the device

NOTE: Make sure you connect to the device via Ethernet cable when upgrading the firmware to avoid corruption during the firmware upgrade procedure.

Reboot

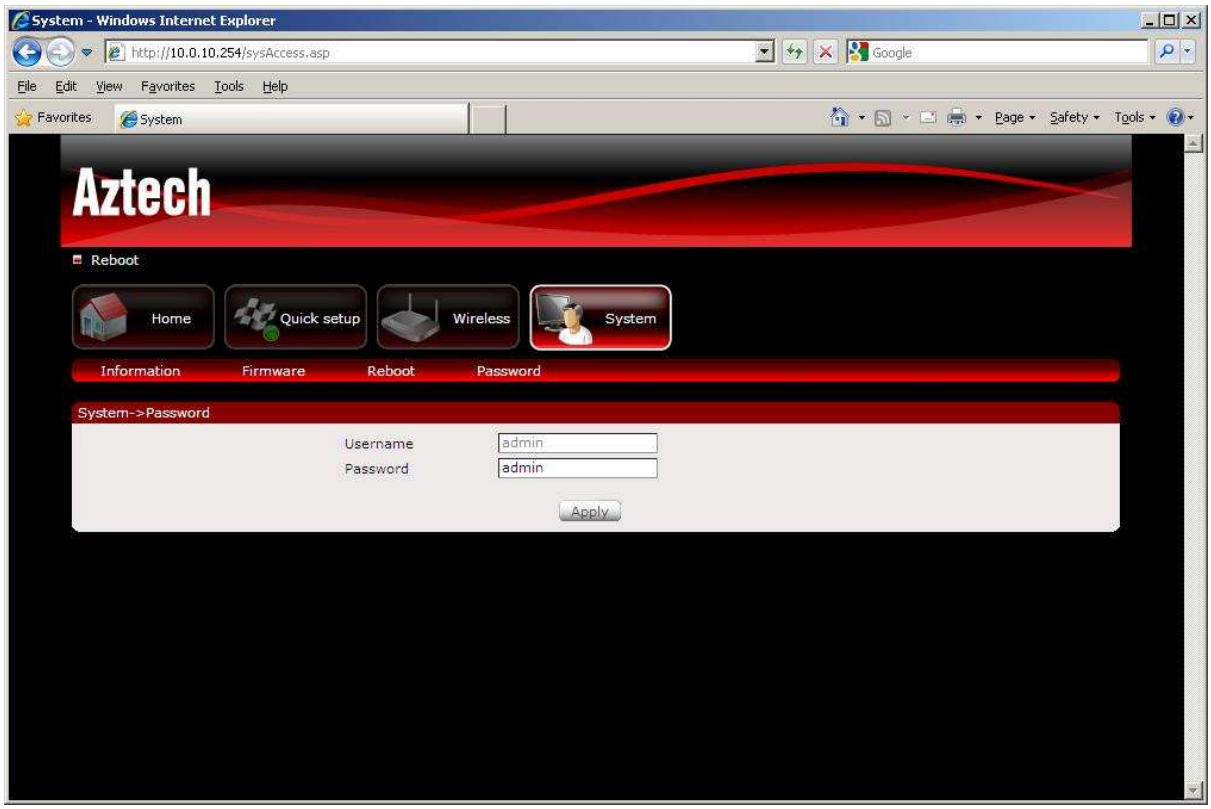
Reboot allows you to reboot the device for new settings to take effect.



- Reboot – Allows you to reboot the device

Password

Password menu allows you to change the device's password to access the Graphical User Interface (GUI).



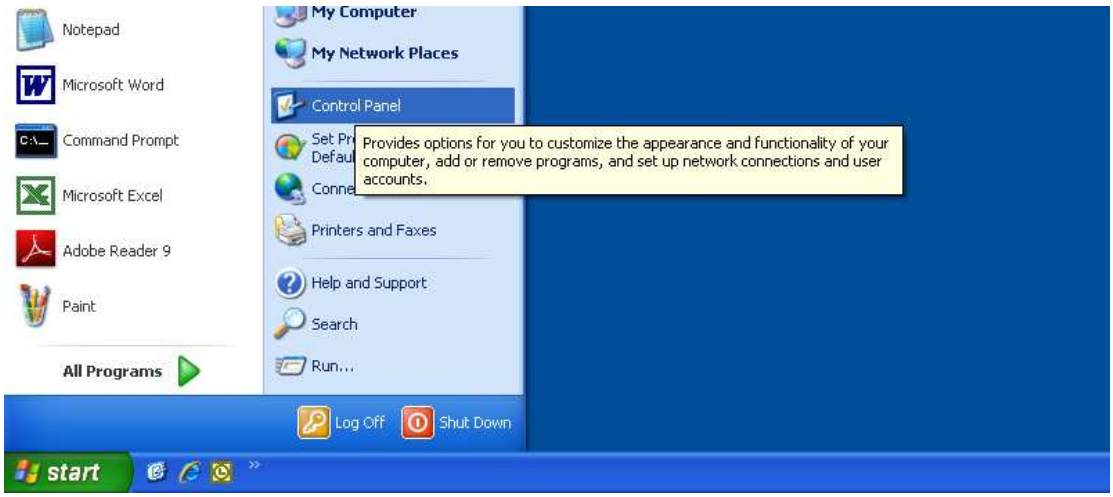
- Password – Allows you to change the router's password

Setting a Static IP on your PC

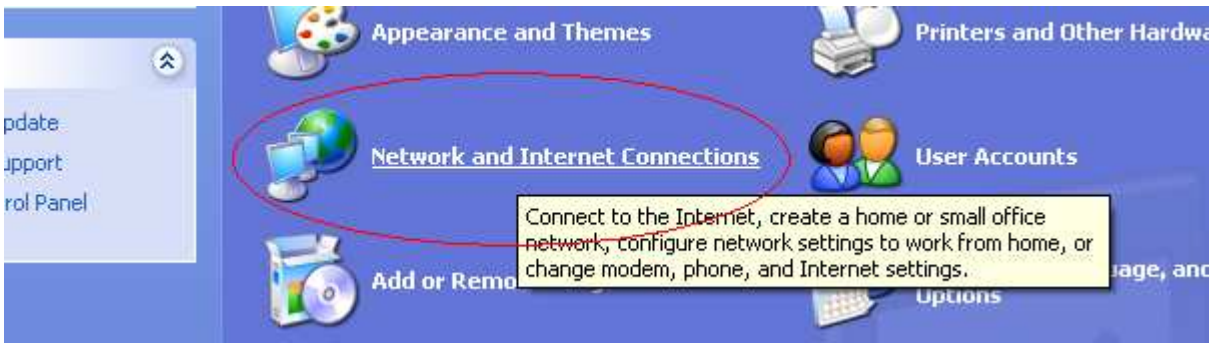
The WL556E Wireless N Repeater will only give an IP address to your PC upon initial installation. Once you have associated it with your Wireless Router/AP, you will no longer have access to the device's web GUI. If you wish to change any settings on the WL556E, you need to set a Static IP address on your PC. Just remember to set it back to "Obtain and IP address automatically" after you are done.

To set a static IP address on your PC using Windows XP:

1. Click Start > Control Panel

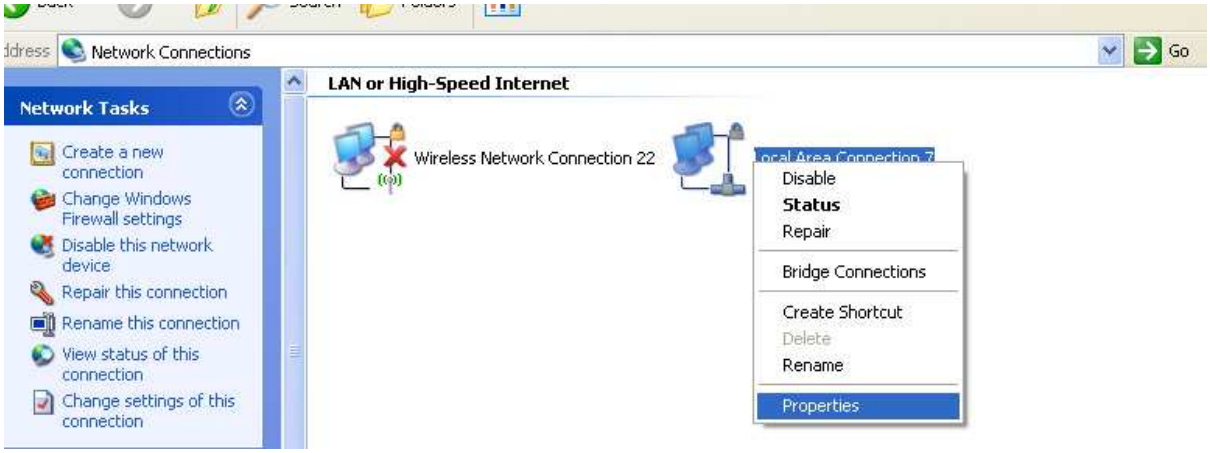


2. Click on Network and Internet Connections

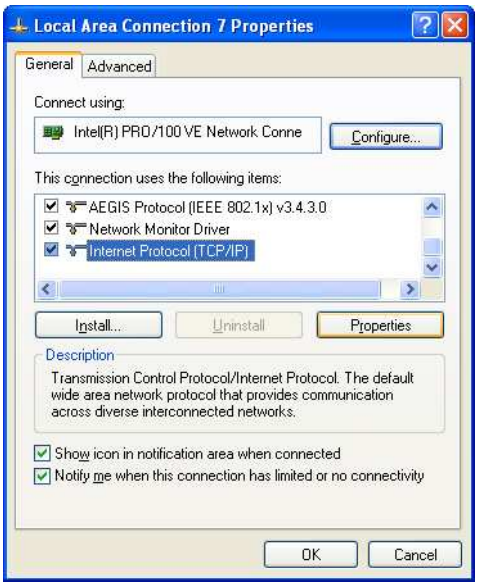

Appearance and Themes
Printers and Other Hardwa
Network and Internet Connections
User Accounts
Connect to the Internet, create a home or small office network, configure network settings to work from home, or change modem, phone, and Internet settings.
Add or Remo
Options

3. Click on Network Connections

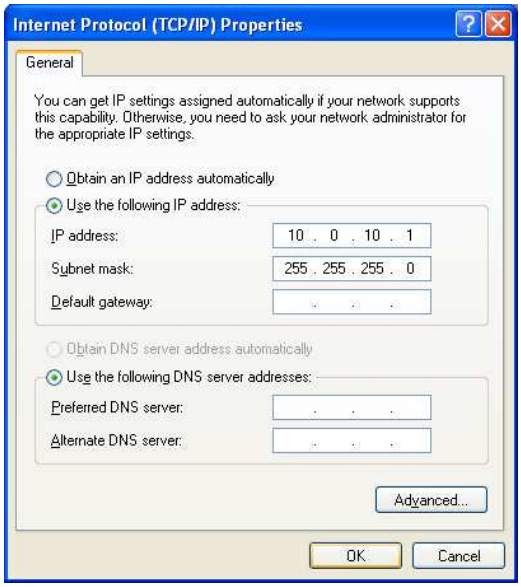
4. Right-Click on the Network Adapter you will use to configure the wireless repeater and click Properties



5. Click to select Internet Protocol (TCP/IP) and click Properties



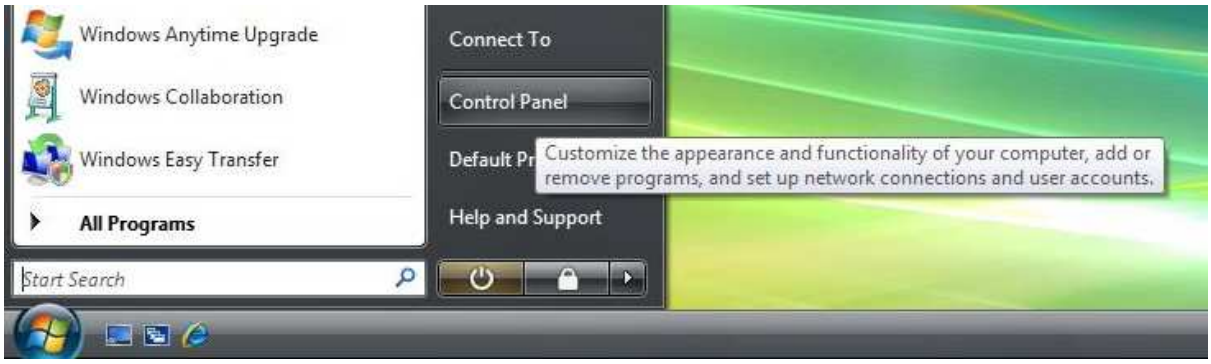
6. Select "Use the following IP address:" and key in 10.0.10.1 as the IP address and 255.255.255.0 for the Subnet mask. Leave the other fields blank.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
10 . 0 . 10 . 1
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

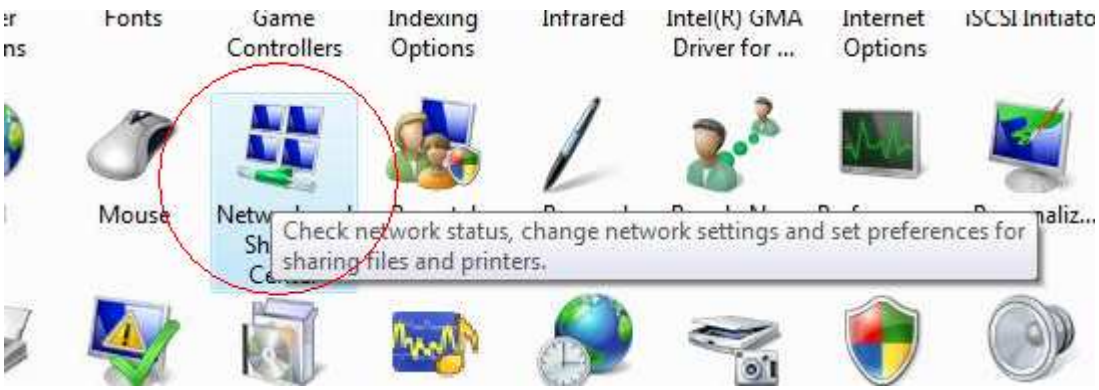
7. Click OK to commit the settings.

To set a static IP address on your PC using Windows Vista:

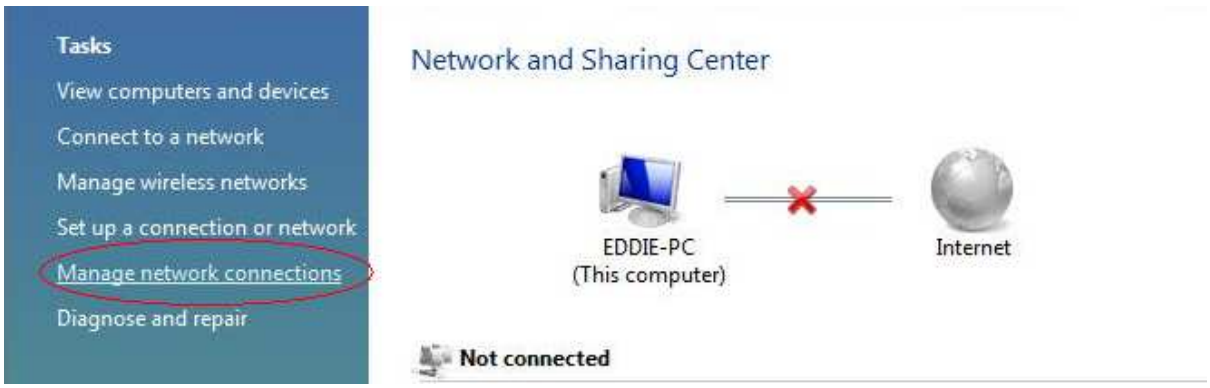
1. Click Start > Control Panel


Windows Anytime Upgrade
Windows Collaboration
Windows Easy Transfer
All Programs
Start Search
Connect To
Control Panel
Default Pr
Customize the appearance and functionality of your computer, add or remove programs, and set up network connections and user accounts.
Help and Support

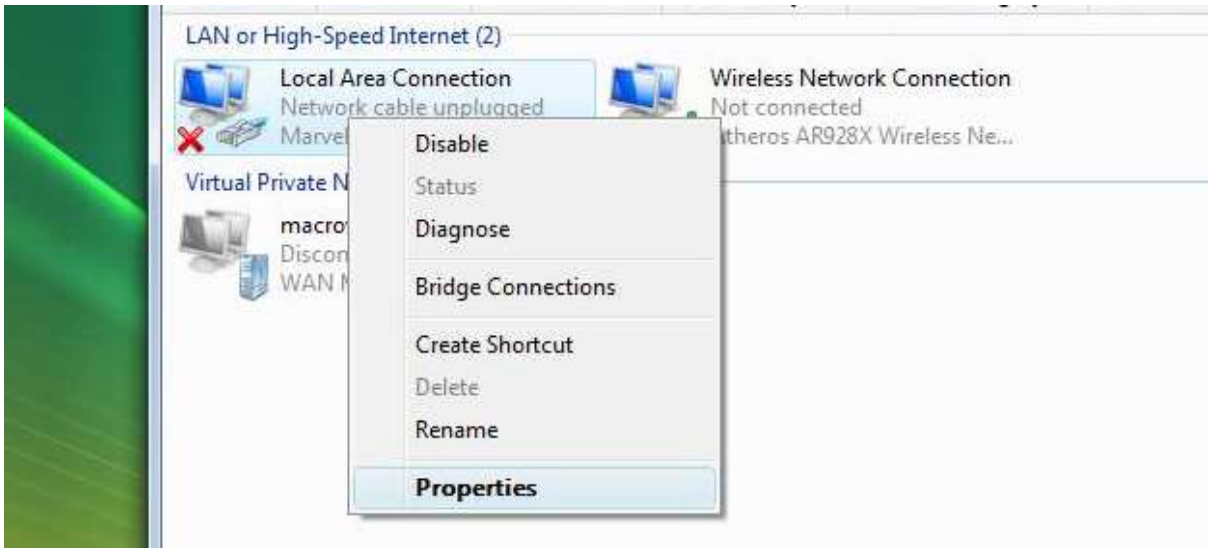
2. Double-Click Network and Sharing Center



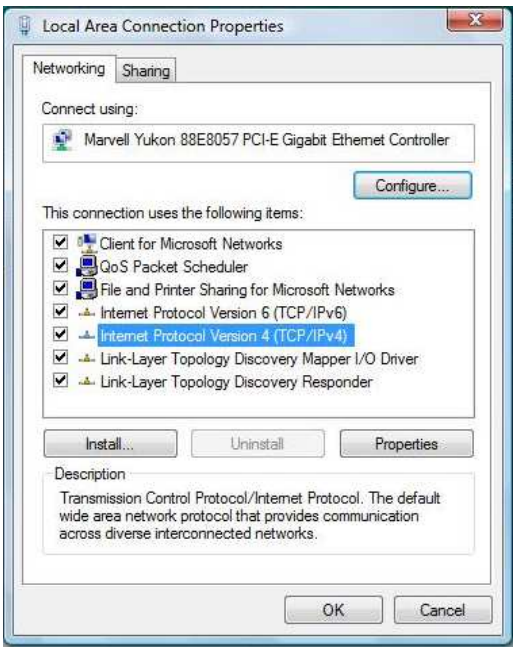
3. Click Manage network connections



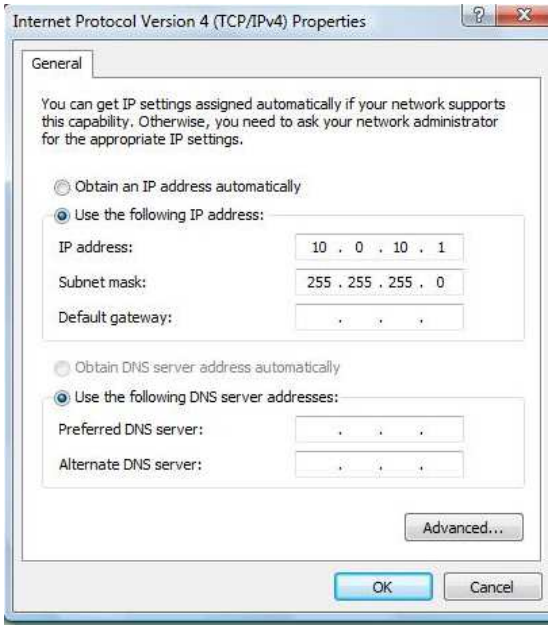
4. Right-Click on the Network Adapter you will use to configure the wireless repeater and click Properties



5. Click to select Internet Protocol Version 4 (TCP/Ipv4) and click Properties



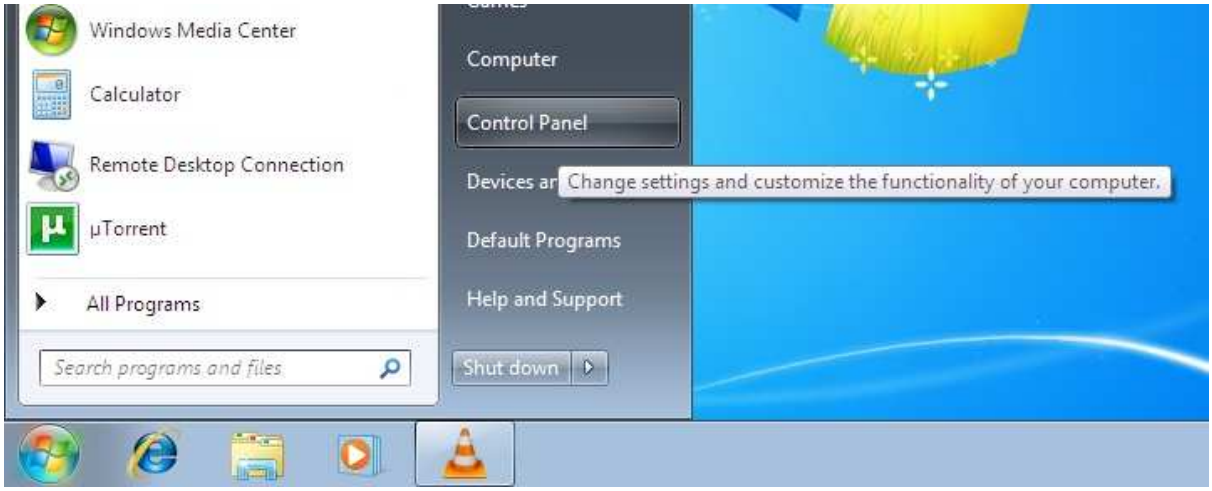
6. Select “Use the following IP address:” and key in 10.0.10.1 as the IP address and 255.255.255.0 for the Subnet mask. Leave the other fields blank.


Internet Protocol Version 4 (TCP/IPv4) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 10 . 0 . 10 . 1
Subnet mask: 255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

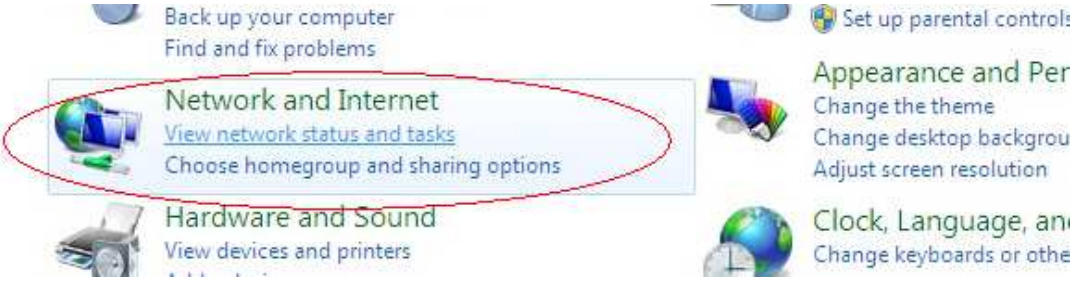
7. Click OK to commit the settings.

To set a static IP address on your PC using Windows 7:

1. Click Start > Control Panel

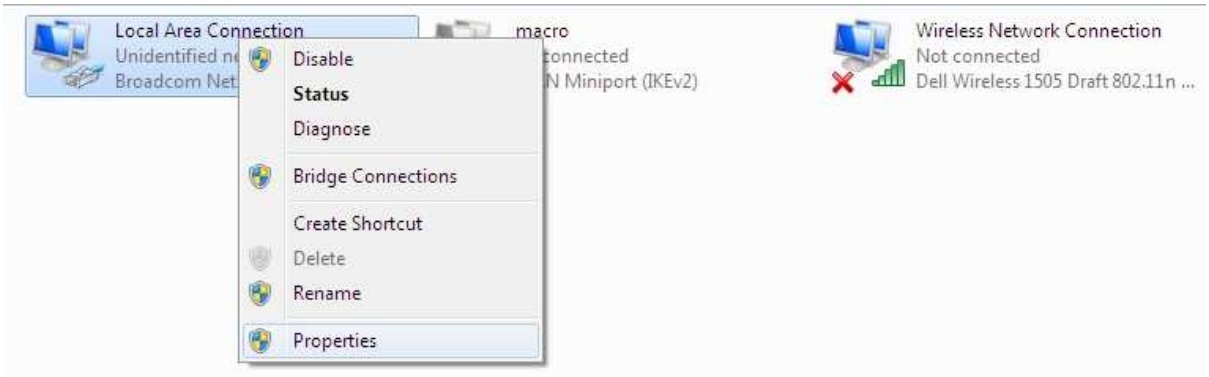


2. Click View network status and tasks

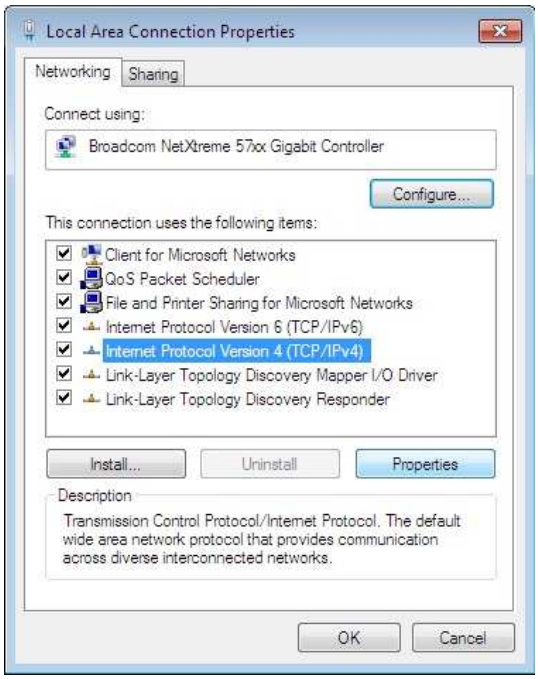


3. Click Change adapter settings

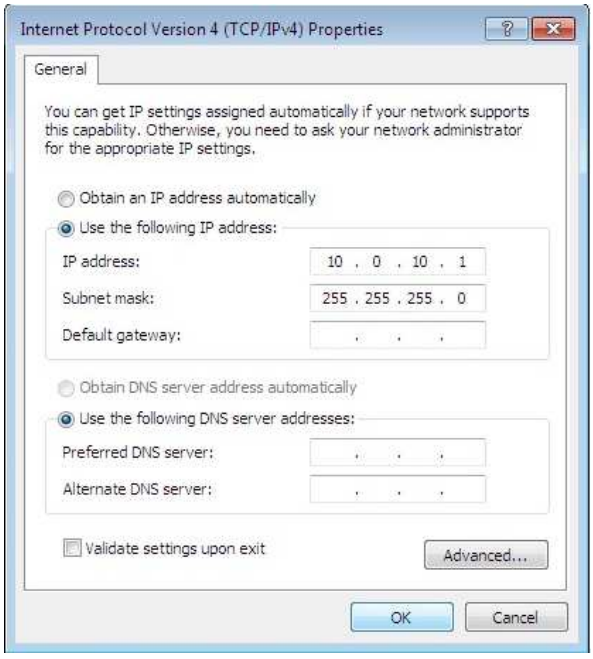
4. Right-Click on the Network Adapter you will use to configure the wireless repeater and click Properties



5. Click to select Internet Protocol Version 4 (TCP/Ipv4) and click Properties



6. Select "Use the following IP address:" and key in 10.0.10.1 as the IP address and 255.255.255.0 for the Subnet mask. Leave the other fields blank.


Internet Protocol Version 4 (TCP/IPv4) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
10 . 0 . 10 . 1
Subnet mask:
255 . 255 . 255 . 0
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Validate settings upon exit
Advanced...
OK
Cancel

7. Click OK to commit the settings

⚠ Safety Precautions

- Do not open, service, or change any component.
- Only qualified technical specialists are allowed to service the equipment.
- Observe safety precautions to avoid electric shock
- Check voltage before connecting to the power supply. Connecting to the wrong voltage will damage the equipment.

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